PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program

Implementation Grant, Round 2, 2013

Applicant	County of Madera	**Amount Requested**	$ 6,419,996
Proposal Title	Madera Integrated Regional Water Management Plan Group IRWM Implementation Grant Application	**Total Proposal Cost**	$ 6,782,996

PROJECT SUMMARY

The proposal consists of the following six projects: (1) Grant Administration, (2) MD19 Parkwood Water Supply and Water Meters, (3) MD8 North Fork/ South Fork Sewer System Improvements, (4) Brockman Flood Control Basin, (5) CSA14 Chuk-Chanse Sewer System Improvements and Water Meters, and (6) MD33 Fairmead Wastewater Collection, Treatment and Disposal Plans.

PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	12/15	Technical Justification	6/10
Budget	3/5		
Schedule	4/5	Benefits and Cost Analysis	15/30
Monitoring, Assessment, and Performance Measures	3/5	Program Preferences	8/10
		Total Score (max. possible = 80)	**51**

EVALUATION SUMMARY

WORK PLAN

The criterion is fully addressed, but is not supported by thorough documentation or sufficient rationale. The goals and objectives of each project of the proposal are stated in context of the adopted IRWM Plan at the end of the each project's summary. A tabulated overview of each project, and maps showing relative project locations, are presented. However, most maps do not show water bodies or monitoring locations and none show DAC areas as described in the PSP. Tasks include appropriate deliverables and reporting submittals which are presented in each of the detailed project work plans. While the applicant discusses how consistency with the basin plan is met for most projects, for Project 2 this information is omitted, and the explanation provided for how Project 4 is consistent with the basin plan in inadequate because it refers to the IRWMP and not the Basin Plan. The tasks are presented in sufficient detail and collectively implement each project in the application. In addition, linkages to regional water management activities are presented for each of the projects. Most of the projects in the proposal are not part of a larger, multi-phased project effort, with the exception of Project 4, for which the applicant states the future enlargement phases could contribute additional

recharge, but all projects would independently function as stand-alone projects. The work plan includes a listing of required permits and their status, including CEQA compliance, for each project. Where applicable, the submitted plans and specifications are consistent with the design tasks included in the work plan. The application includes Data Management and Monitoring Deliverables consistent with the IRWM Plan Standards and Guidance.

BUDGET

The budgets for half of the projects in the application have detailed cost information that is generally consistent with the task and subtask descriptions in the work plan, but are not all costs are reasonable or supporting documentation is lacking. A summary budget is provided for each project. Except for Project 1, labor rates and hours estimates are not included. Project 3 does not have detailed budget information or supporting documentation, except for a page of budget notes consisting of general assumptions which is insufficient to corroborate the budget amounts. Project 1 includes costs for labor inflation and contingency (totaling $42,416; 20.9% of project budget) which are not well supported. In addition, the total budget for Project 1 seems excessive given that project administration costs are also embedded in each of the other five projects. Not all the tasks shown in the budget tables are consistent with tasks and subtasks shown in the work plan and schedule. For example, the budget for Project 2 does not include subtasks 6.1 to 6.4 or 7.1 to 7.3 from the work plan. The Project 3 budget lacks needed detail to support specific cost items. For instance, the applicant states the lump sums given in Tasks 6, 7, 8, and 9 were "created largely based on the efforts to plan and design similar projects." Yet, no information is provided on the comparable levels of effort, the similar projects referenced, and what assumptions are being made. Project 4 has a budget that is consistent with the schedule and work plan, except Subtask 14.1 (legal fees) which is not included in the detailed budget. The Project 5 budget does not include subtasks identified in the work plan (Subtask 3.1 to 3.4 and 6.1 to 6.4, 15.1-15.8).

SCHEDULE

The schedule is consistent with the tasks in the work plan and budget, reasonable, and demonstrates a readiness to begin construction of at least one project no later October 2015. Schedules and notes indicate that Project 5 has the earliest anticipated construction start date of November 2014. Project 2 and Project 3 have anticipated construction start dates in early 2015. The Individual schedules are reasonable, despite some inconsistency appearing on Projects 2 and 3, which are missing subtasks shown in the work plan. For Project 2 the schedule does not include subtasks 6.1 to 6.4 and 7.1 to 7.3 from the work plan. For Project 3, the schedule does not include work plan subtasks 3.1 to 3.4 and 6.1 to 6.3. The schedules adequately document the readiness to proceed. Project 3 will require the issuance of a new Waste Discharge Requirement (WDR) for the expanded treatment facility and the project schedule indicates that a 4-month time period will result in the issuance of this new WDR, which may be overly optimistic.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is less than fully addressed and documentation or rationales are incomplete or insufficient. Not all targets are appropriate measures for stated project benefits or quantifiable. For instance, for Project 6, the target "Use of 75 percent of Fairmead wastewater effluent as recycled water for irrigation purposes" does not directly assess whether the benefit of "Reduce groundwater Overdraft" is realized by the project. Another example is the Project 4 target for achieving the benefit of reduced flood damage is expressed in terms of the amount of water imported for recharge, which is not an appropriate target for measuring flood damage reduction. Water quality improvement benefits are claimed for Projects 3, 4, 5, and 6, but only Project 6 identified water quality constituents and numerical targets (zero presence of coliform, and not exceeding the nitrate MCL) that will be used to assess water quality improvement as a result of the project. None of the projects claiming water quality benefits have clearly indicated monitoring points to that will allow determination of whether targets are met. Benefits for increased water supply or water conservation benefits are adequately described using appropriate, measurable targets for the benefits claimed.

TECHNICAL JUSTIFICATION

The proposal appears to be technically justified to achieve the claimed benefits but lacks documentation that demonstrates the technical adequacy of the projects or physical benefits are not well described. Not all project benefits are provided by the applicant with appropriate explanations or summaries of studies that support the type or magnitude of benefits claimed. For example, for Project 6 the applicant states that a central wastewater treatment plant will alleviate a health risk to residences from the threat of failing septic systems. The applicant references a survey by Madera County about the existence of the health threat but this supporting information was not included in the application. The project claims the benefit of groundwater overdraft mitigation based on the quantity of WWTP that will be used for irrigation in place of farmers' pumping groundwater. This benefit is quantified in terms of reduction in costs from decreased water pumping and well replacement, but the applicant provides no information to quantify the actual savings.

The applicant claims Project 3 will provide a benefit resulting from increased use of septic tank effluent to recharge groundwater, and bases this increase on the total flow from the South Fork septic systems that would be diverted to the expanded WWTP. However, no data are provided that support any added benefit to groundwater levels, since the existing septic flows already recharge groundwater.

Although the applicant provides (in Attachment 8) a quantification of the reduced the risk of flooding and flood damages for Project 4, the applicant does not provide documentation or references to support the claimed benefit of surface water import recharge (e.g., a soils map showing soil permeability rates) that support a realistic long-term permeability rate for the project area. In addition, a groundwater quality enhancement benefit is claimed but no groundwater quality data is provided in support of the claim that project is expected to yield improved groundwater quality.

BENEFITS AND COSTS ANALYSIS

Collectively the proposal is likely to provide a medium level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking.

Water savings from meters are claimed but volumetric pricing to induce the savings is not assured. Also, meters may not be required by law for the small water suppliers that implement these projects. Therefore, benefits of metering are likely overstated. Avoided costs for wastewater collection and treatment generally appear reasonable. However, some of the avoided costs provided are not well documented and/or not demonstrated that they would be incurred in absence of the proposed project.

The flood control project proposes to use local floodwater and Central Valley Project flood flows delivered from Friant Dam to recharge groundwater. The flood benefits analysis is generally acceptable, but uses default values for property value rather than values specific to the local area. Reviewer also noted an error in Table 17, and correcting it raised the value of flood benefit. For water purchased for recharge, proposal does not establish that the local agency would actually purchase Class II water in absence of the project. The cost table for the project had some incorrect entries.

Proposal also includes a summary table of non-monetized benefits, including public health and safety, other social benefits for DACs, water quality, and protection of groundwater. Total project costs are $6.77 million in net present value. Quantified benefits after correction of flood benefits and use of avoided cost from C-E table are $3.14 million. Benefits could have been higher if better C-E analysis had been used for one or two other projects. Non-monetized social and water quality benefits are significant, so overall benefits are likely to be medium to high relative to costs.

PROGRAM PREFERENCES

Applicant demonstrates a high degree of certainty that the proposal will achieve two program preferences and five statewide priorities: (1) Include Regional Projects or Programs, (2) Address the Critical Water Supply/Water Quality needs of a Disadvantaged Community, (3) Drought Preparedness, (4) Use/Reuse Water More Efficiently, (5) Expand Environmental Stewardship, (6) Practice Integrated Flood Management, and (7) Protect Surface Water and Groundwater Water Quality.